BUSINESS CONDITIONS



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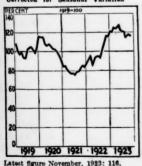
BUSINESS CONDITIONS IN THE UNITED STATES

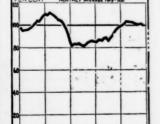
PRODUCTION of basic commodities and factory employment decreased in November. Distribution of merchandise by wholesalers and retailers was somewhat less active and wholesale prices showed a slight further recession.

PRODUCTION-Production in basic industries decreased about 2 per cent in November. The decline was due chiefly to reduced production of iron and steel, and smaller sugar meltings. The Federal Reserve Board's new index of factory employment which is shown by the accompanying chart also declined, due to lessened activity at iron and steel plants and large seasonal reductions at clothing establishments. The volume of employment is now 2 per cent smaller than in the spring but 3 per cent larger than a year ago. Contract awards for new buildings were smaller in November than in October in all reporting districts except New York but were 20 per cent larger than a year ago.

Final estimates by the Department of Agriculture show larger yields of corn, oats, tobacco, and cotton than in 1922, and smaller yields of wheat, hay, and

INDEX OF PRODUCTION IN
BASIC INDUSTRIES
Combination of 22 Individual Series
Corrected for Seasonal Variation





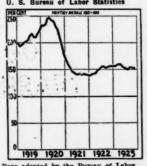
INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES

1919 1920 1921 1922 1923 Latest figure November, 1923; 100. potatoes. The total value of agricultural production at December 1 prices was 12 per cent larger than in 1922. Each of the ten principal crops except wheat showed an increase in value.

TRADE-Railroad freight shipments in November showed about the usual seasonal decline from October but were in heavier volume as compared with previous years. Wholesale trade was 13 per cent less in November than in October, which is more than the usual decrease at this season, but sales continued to be slightly larger than a year ago. Sales of hardware, drugs, and meat were larger than in November, 1922, while sales of shoes were smaller. Retail business was smaller than in October in most lines. Sales of mail order houses declined more than sales of department stores, but were 11 per cent larger than a year ago.

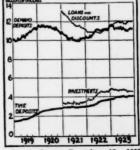
PRICES-The Bureau of Labor Statistics index of wholesale prices declined in November to a point 4 per cent lower than last spring and about 3 per cent lower than a year ago. The chief reductions occurred in prices of

PRICES—INDEX NUMBER OF WHOLESALE PRICES U. S. Bureau of Labor Statistics



adopted by the Bureau of Lab

BANK CREDIT er Banks in Leading Cities



Latest figures December 12, 1923: loans and discounts 11,918 million; investments 4,472 million; demand deposits 11,252 million; time deposits 4,059 million.

Compiled December 27, 1923

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animal products, fuel, and house furnishings. Prices of clothing and crops, on the other hand, increased and the latter group averaged higher than in any month since 1920. During the first half of December prices of sheep, beef, sugar, cotton, silk, and rubber declined, while quotations on crude oil, wheat, and wool were slightly higher.

BANK CREDIT—The total volume of credit extended by member banks in leading cities showed but little change between the middle of November and the middle of December. A seasonal reduction in commercial and agricultural loans in most districts was accompanied by increased loans on securities, with the result that total loans remained practically constant.

During the same period borrowings at the Federal Reserve banks were also practically unchanged. Holdings of acceptances increased somewhat, partly in connection with the financing of cotton exports. The increased demand for currency for holiday trade was reflected in both a moderate expansion in Federal Reserve note circulation and a reduction in gold certificates held by the reserve banks. Rates on commercial paper sold in the open market continued to show an easier tendency, as indicated by increased sales at 4¾ per cent, particularly in interior districts. The December issues of one year 4¼ per cent and six months 4 per cent treasury certificates, compared with 4¼ per cent on a six months issue sold in September, were largely over-subscribed.

EXPLANATORY NOTE-This month we present for the first time a chart showing the new index of employment in manufacturing industries, compiled by the Federal Reserve Board's Division of Research and Statistics. Wide industrial and geographical representation in the composition of the index is obtained by using data collected by a number of Federal and state agencies covering thirtythree separate industries, which are grouped into ten general classes, as follows: metals; textiles; lumber; vehicles; paper and printing; food; leather; stone, clay, and glass; tobacco; and chemicals. The final index and each of the ten group indexes were obtained by combining the thirtythree individual industry series, weighting them in accordance with their relative importance as determined by the number employed according to the census of manufactures of 1919 and 1921. The index is expressed in terms of percentages with the monthly average for 1919 as the base, i. e., 100 per cent. It is so constructed that its movements, although they do not measure the total volume of employment, reflect increases or decreases in this volume. No correction was made for normal seasonal variations, because, although these fluctuations are noticeable in individual industries, they vary as to time and degree and in the final index largely offset each other. A full description of the data and methods used in compiling this index and of the results obtained was published in the December issue of the Federal Reserve Bulletin.

BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

SURVEY of current reports to the Federal Reserve Bank of Chicago indicates on the whole a slackening in business activity throughout the Middle West. Much of this is seasonal, such as the slower operations at automobile plants and in other manufacturing industries, the decreases in the movement of live stock and in the factory output of dairy products, and the curtailment in building and construction with the attendant declines in allied industries. Seasonal factors were also evident in the November reduction in freight carloadings and in wholesale distribution. For the falling off in retail sales, however, the unusually mild weather conditions were largely responsible, which also exerted an unfavorable influence on the coal markets.

Wool and hide markets during November, on the other hand, were more active, and the revival in pig iron buying was perhaps the most striking development of the month, although its production as well as that of steel ingots fell to low points for the year.

CREDIT AND FINANCE

While the announcements of extra dividend disbursements have stimulated a better market sectionent; these factors have not resulted in any noticeable relaxation of conservative control in business and banking operations. With the approach of the inventory season a tendency toward lessened activity has manifested itself in many lines, though the general credit position remains unchanged from conditions a month ago and justifies a belief that the situation at bottom is sound. Heavy buying with the approach

of the Christmas season has largely offset earlier inactivity in retail trade, mainly the result of mild weather, coupled with rain and bad roads in many rural sections of the district.

Conditions in the agricultural sections are much better than a year ago, and during the autumn months the movement toward a better situation has been quite general. Credit demand on country banks has been steady, particularly for purchases of feeding cattle, and little liquidation has yet taken place, though some grain and considerable live stock, particularly hogs, have moved off the farms during recent weeks. The continued shipment of lightweight hogs probably has been influenced rather extensively by the desire of farmers to reduce their droves lest cholera later reduce potential income from this quarter.

Loans to member banks in agricultural sections of the district by the Federal Reserve bank have shown a general upward trend for several weeks, and a similar tendency has been shown in loans and discounts of reporting member banks, though there are general indications that many banks are caring for the needs of their customers with less extensive recourse to the Federal Reserve bank. Total debits to individual accounts in the district declined from October because of fewer business days in the month and a national holiday, the daily average in November showing an increase over the preceding month. Savings in the district have increased in volume steadily during the fall; reports from banks representing approximately 40 per cent of the savings deposits in this district showed a gain of 1.1 per cent in November over the preceding month.

Page 2 January

Business Failures—The number of business failures in the Seventh district, according to Dun's Review, were 10.5 per cent in excess of casualties in October, and liabilities involved increased 34.3 per cent. In October the percentage increase in number over September was 20.9 per cent, but liabilities shrank 20.8 per cent. For the entire country, however, the number gained only 1.9 per cent in November, while liabilities were less by 36.6 per cent.

Commercial Paper—Sales of commercial paper in November declined 7.2 per cent from those in October, but remained at a slightly higher level than in November, 1922. Demand for paper is variously reported by dealers as light, fair, and active, the prevailing condition being fair. Lack of uniformity is also shown in the statements concerning supply; a number of dealers report a slight betterment, others find the supply being curtailed. According to several dealers, rates show an easing tendency; a decrease of ½ per cent in the prevailing rate in October having taken place in November.

On a weekly average basis, the volume of bills purchased by six bill dealers reporting to this bank increased 18.9 per cent in the four-week period ended December 12 from those bought in the previous five-week period. Average weekly sales increased to practically the same extent, although this does not take into account large transfers made by one firm to its other offices. Bills held at the close of the period totaled \$7,334,216, which compares with \$7,637,584 at the close of the previous period. Rates for short term paper, which was in best demand, remained practically stationary; rates on longer term paper showed a slight easing tendency.

Acceptances—The volume of bills accepted in November was 95.0 per cent greater than reported in October by twenty-seven banks. Although this large increase was shown in the aggregate amount, three banks reported decreases and twelve banks no acceptances executed. This signal increase was accompanied by a volume of bills bought during the month, larger by 150.6 per cent than in October; and those sold increased 105.9 per cent. Bills held at the close of the month were 9.4 per cent in excess of those held at the close of October. The liability of these banks as acceptors increased 28.1 per cent, in contrast with the slight decrease noted in October. In November a further lessening was shown in the volume of their own acceptances held by these banks.

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Bankers' acceptances purchased by the Federal Reserve bank in November were in practically the same volume as in October, remaining at 22 million. There were no sales from holdings in November; and holdings at the close of the month were 39 million as compared with 37 million at the close of October.

AGRICULTURAL FINANCING

The loans outstanding of twenty Joint Stock Land banks operating in the five states lying largely in the Seventh district aggregated \$141,356,881 on November 30 as compared with \$140,418,427, October 31. This increase of \$938,454 compares with an expansion of approximately 2 million dollars in each of the four preceding months. The four Federal Land banks covering the same territory showed aggregate loans outstanding November 30 as \$121,558,090, an increase of slightly over 2 million above

the figure on October 31. This is approximately the same rate of increase as has been shown for several months by these banks.

Reports of the four Federal Intermediate Credit banks on operations within states lying wholly or partly in this district reflected an increased volume in loans outstanding on November 30, amounting to \$418,688, compared with \$271,566 in loans by three banks October 31, an increase of \$147,122, of which \$10,406 represents the loans of one institution added to the reporting list during November. On October 31 the increase over September 30 had been about \$84,000.

The tabulation below indicates the distribution by states of the outstanding loans of each of these three classes of banks on November 30.

Number of banks	JOINT STOCK LAND BANKS	FEDERAL LAND BANKS	INTERMEDIATE CREDIT BANKS
Illinois	\$ 39,397,801	\$ 19,035,740	\$249,172
Iowa	69,999,345	40,395,850	64,523
Indiana	26,659,635	26,477,800	10,406
Wisconsin	4,105,400	20,399,700	94,587
Michigan	1,194,700	15,249,000	
	\$141,356,881	\$121,558,090	\$418,688

Numerous bond issues of Joint Stock Land banks have been offered recently on the Chicago market, varying but slightly in terms from the offerings in October. The Lincoln (Nebraska) Joint Stock Land Bank, Burlington (Iowa) Joint Stock Land Bank, and the Central Iowa Joint Stock Land Bank of Des Moines were on the list. An additional \$10,000,000 offering of Federal Intermediate Credit Bank 41/2 per cent six months' notes was placed on sale by twelve underwriters in Chicago, St. Louis, Boston, and Philadelphia. This issue brought the total of outstanding debentures of the twelve Intermediate Credit banks in the United States to \$30,500,000, representing three-fourths of the amount for which these banks may still call upon the Treasury. These notes are not Government obligations, however, but are the secured obligations of banks operating under Federal charter with Governmental supervision.

MEMBER BANKS IN THE DISTRICT

Loans and discounts of reporting member banks in the district showed a declining tendency in the aggregate after a high point November 7, for which industrial centers, principally Chicago and Detroit, were responsible. In other selected cities the trend was in the opposite direction, though no great expansion took place.

Reporting member banks in Chicago showed a declining volume of holdings of Government securities, as was the case with "other" security holdings during recent weeks. In Detroit holdings of Government securities have changed little since October 24, on which date a small drop occurred from the report of the preceding week. Almost negligible changes likewise took place in "other" investments of Detroit banks. In other selected cities, Government securities shrank perceptibly, a movement begun in July, while holdings of other securities in selected city member banks have gradually increased in amount.

Net demand deposits of Chicago reporting member banks declined noticeably after November 14, though reports for the first two weeks in December showed an increase, and time deposits have moved upward since September. Detroit banks showed trends similar to Chicago in both time and demand deposits, as did members reporting in other selected cities, except that time deposits moved slightly downward December 12. Government deposits of Chicago, Detroit, and other selected city banks have lowered in volume steadily since the middle of September, following a rise at that time incident to quarterly tax payments.

POSITION REPORTING MEMBER BANKS, 7TH DISTRICT

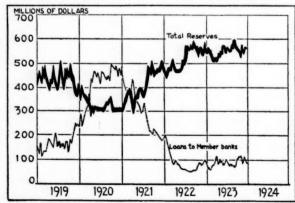


*Break in curve indicates data not comparable with preceding. Based on weekly reports to this bank by approximately 49 member banks in Chicago, 13 in Detroit, and 44 in other selected cities. Latest figures shown, December 12, 1923.

POSITION OF THE FEDERAL RESERVE BANK

The aggregate of loans to member banks has shown a downward trend from the high point on October 31, though on November 28 a figure of \$114,025,000 was reached, which was only 4 million below the peak. This, however, was the result of operations for a few large city banks. Loans to members moved upward in agricultural sections reflecting the continued demand for funds for purchases of

POSITION FEDERAL RESERVE BANK OF CHICAGO



Latest figures shown, December 19, 1923, in thousands of dollars: Total Reserves, 564,115; Loans to Member Banks, 86,159.

feeding cattle as well as for grain and live stock movement off the farms. Borrowings of members in several industrial centers, notably Chicago and Indianapolis, moved downward, doubtless partially in response to a slowing down tendency in many lines of industry with the approach of the inventory season. In Milwaukee the trend was toward expansion, though not marked, and in Detroit no definite trend was evident.

Total earning assets followed the downward trend of loans, purchases of bills in the open market changing little in weekly volume. Federal Reserve notes exhibited no established movement, and on December 19 were about 8 million in excess of the figure shown on November 21, the corresponding reporting date in that month.

DEBITS TO INDIVIDUAL ACCOUNTS

Fewer business days in the month and a national holiday were mainly responsible for a decline of 5.1 per cent in the aggregate of debits to individual accounts in November as compared with October, reported by 24 clearing centers in the district. The daily average in November, however, was in excess of October. The decline in the aggregate was less in extent than in the corresponding month of 1922, when the drop from October was 8.7 per cent. In the four larger cities, Chicago, Milwaukee, Detroit, and Indianapolis, the decrease this year was 4.3 per cent as compared with a drop of 9 per cent in the same month of 1922. In twenty smaller centers the shrinkage from October was 9.7 per cent as against 6.5 per cent in November, 1922.

VOLUME OF PAYMENT BY CHECK Checks Drawn on Clearing House Banks, 7th District



Figures used are estimates for calendar months based on weekly reports to this bank. Latest figures shown, November, 1923, in thousands of dollars: Chicago, Milwaukee, Detroit, and Indianapolis, 3,880,297; 20 Other Clearing House Centers, 599,975.

SAVINGS ACCOUNTS AND DEPOSITS

Savings deposits continued to increase during November, according to reports received for December 1 from banks representing approximately 40 per cent of the savings deposits in this district, showing a gain of 1.1 per cent over November 1 and 10.6 per cent over December 1, 1922. The reason given by some banks for the former increase was the crediting of interest due December 1. The greatest

changes during the month occurred in Illinois and Wisconsin, the former state registering an increase of 1.4 per cent and the latter 1.5 per cent over November 1. The average account in the district on December 1 was 0.4 per cent larger than the previous month and 1.8 per cent greater than a year ago.

BONDS AND INVESTMENTS

Although new financing was in smaller volume the first three weeks in December than during the same period of November, trading in the bond market continued on a fair scale. Public utilities are still the most readily absorbed bonds on the taxable list, with railroad bonds a good second; sound industrials are regaining favor to some extent, when attractively priced; and demand for municipals continues in fair volume as compared with the demand earlier in the year. Houses dealing in high-grade first mortgage real estate bonds report a good investment demand. Price levels have remained practically unchanged.

AGRICULTURAL PRODUCTION AND CONDITIONS

Cattle on farms in the Seventh district as a whole decreased 1.9 per cent in number on December 1, 1923, from the corresponding date a year ago, according to direct reports to this bank by 146 county agents, although holdings in Indiana were slightly greater than on December 1, 1922. Outbreaks of hog cholera were reported by agents in Illinois, Indiana, and Iowa. The risk incident to holding hogs on the farm because of the possibility of infection later, has doubtless been an important factor in the continued marketing of lightweights during November, despite the fact that corn prices have become more favorable to feeding than a short time ago.

The district crop of winter wheat was reported as making good progress during November and the first part of December.

Statistics based on farm values and production estimates as of December 1, and compiled by the Bureau of Agricultural Economics show the estimated value of principal crops in the United States at \$8,322,695,000 for 1923 compared with \$7,449,804,000 a year ago.

PRODUCTION AND VALUATION OF CROPS

Compiled by the Bureau of Agricultural Economics In thousands, and based on prices of December 1

	SEVENTH DISTRICT		UNITED	STATES
	RODUCTION	VALUE*	PRODUCTION	VALUE
Wheat (bu.)	82,965	78,651	785,741	\$ 725,501
Corn (bu.)	.976,124	634,935	3,054,395	2,222,013
Oats (bu.)	490,254	191,807	1,299,823	539,253
White Fotatoes (bu.)	70,752	41,565	412,392	339,322
Hay (tons)	. 18,003	250,272	106,626	1,390,967
1922				
Wheat (bu.)	. 77,125	83,280	867,598	873,412
Corn (bu.)	.995,173	580,782	2,906,020	1,910,775
Oats (bu.)	.474,905	178,136	1,215,803	478,948
White Potatoes (bu.)	. 81,714	35,448	453,396	263,355
Hay (tons)		230,755	112,013	1,319,277
*District value compiled	by Federa	Reserve	Bank of Chi	cago.

GRAIN MARKETING

Returns from 146 county agents representing 172,840 farmers in the Seventh district show that about 72 per cent of the wheat produced in those counties in 1923 had left the farms prior to December 1. Approximately 18 per cent has been marketed since our survey of September 1, 1923. Although these figures do not include holdings in country elevators, they indicate that the percentage of the district wheat crop already marketed by farmers may have been slightly greater than normal.

The total United States, Canadian, and British visible wheat supply was 249,962,000 bushels on December 1, 1923, compared with 214,216,000 bushels on November 3, 1923, and 190,545,000 bushels on December 2, 1922.

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Wheat and oats were handled in November in smaller total volume through the interior primary markets of the United States than in October or a year ago. Receipts of corn were greater than in either the previous month or

November, 1922. The amount of corn forwarded from these markets although more in November, 1923, than in October, 1923, was less than in November last year. November exports of wheat, barley, and oats were smaller than a month previous but those of corn and rye increased.

SHIPMENTS OF FLOUR AND GRAIN FROM CHICAGO

	In t	housands				
	FLOUR	WHEAT	CORN	OATS	RYE	BARLEY
By Boat	BBLS.	Bu.	Bu.	Bu.	Bu.	Bu.
Lake Season, 1923	995	17,685	14,104	2,602	625	
Lake Season, 1922	737	36,293	46,143	12,216	2,410	********
By Rail						
11 Months, 1923	7,360	11,281	44,226	50,624	2,792	3,466
11 Months, 1922	9.417	12.556	70,008	57.163	2.253	3.008

Grain prices at Chicago were easier in November than in October.

FLOUR

During November aggregate production at forty flour mills in this district dropped 13.5 per cent from the previous month, while the operating ratio fell from 60.4 per cent in October to 56.4 per cent in November. These declines may be partly explained by reported weakening in demand for flour and by the fact that there are two less working days in November than in October. Compared with a year ago production decreased 9.0 per cent. The output of wheat flour during November declined 20.0 per cent from the previous month and 15.7 per cent from November, 1922, while production of flour other than wheat, according to figures for twelve mills, increased 56.3 per cent over October and 61.3 per cent over a year ago. A fairly active demand for rye flour for export was reported during the latter part of November.

Stocks of flour on hand showed an increase of 2.0 per cent during the month, while sales decreased 10.2 per cent in volume and 18.6 per cent in value; compared with a year ago, they declined 14.8 per cent in volume and 18.2 per cent in value, while stocks of flour on hand at the end of the month decreased 6.3 per cent. Wheat stocks held at mills at the end of November were 3.9 per cent smaller than at the end of October, and 11.1 per cent greater than a year ago.

Decreased activity in the flour industry is also reflected in receipts and shipments at Chicago. Receipts of flour during November amounted to 879,000 barrels compared with 953,000 barrels during the previous month and 1,738,000 barrels during the same month a year ago; shipments from Chicago were 735,000 barrels compared with 816,000 barrels in October and 1,341,000 barrels in November, 1922.

MOVEMENT OF LIVE STOCK

Fewer cattle, sheep, and calves were slaughtered in November than in the corresponding month last year although the decline from October, 1923, was partly seasonal.

The November slaughter of hogs was seasonally greater than October and was considerably more in volume than that for November in either 1921 or 1922.

LIVE STOCK SLAUGHTER

	CATTLE	Hogs	SHEEP	CALVES
Eight yards in district,				
	231.011	1,387,698	275,203	101,190
Public stock yards in U. S.		-,,		,
	754.084	3,657,036	777,091	352,101
	931,380	3.128,998	980,549	441,761
November, 1922		2,917,935	880,648	359,230
	640,550	2,370,439	988,412	294,483

November shipments of feeder cattle, calves, and sheep back to farms were seasonally less than in October, the volume being even less than in the corresponding period a year ago.

AVERAGE PRICES OF LIVE STOCK

Per hundred pounds at Chicago

,	WEEK ENDEL)	MONTHS OF	F
	DEC. 15,	Nov.	Ост.	Nov.
CLASS	1923	1923	1923	1922
Native Beef Steers (average)	\$	\$ 9.70	\$10.15	\$ 9.85
Fat Cows and Heifers	5.35	5.30	5.45	4.90
Canners and Cutters	2.70	2.75	2.85	3.10
Calves	9.00	8.80	11.10	9.40
Stockers and Feeders	5.85	5.95	6.00	6.30
Hogs	6.76	6.90	7.45	8.10
Yearling Sheep	10.50	10.35	9.90	11.20
Sheep	6.70	7.00	6.45	7.05
Lambs	12.65	12.75	12.95	14.10

MEAT PACKING

A slight slackening from October in production of packing house products was indicated in November, but December 1 inventories were larger than those of a month ago; lard holdings declined. Figures for the period covered by the last pay-date in November show a falling off from October in hours worked and total payrolls. Sales in dollars were 7.7 per cent greater in November than a year ago, but because of holiday consumption of poultry showed a seasonal decline of 17.3 per cent from October, 1923, according to statistics compiled from reports sent direct to this bank by 60 meat packing companies in the United States. Chicago wholesale prices of beef and lamb were practically unchanged from those in October; fat backs, picnics, and lard, and regular hams were firmer; but prices of other edible products were easier in November than in the previous month.

The sale of pork fats to Continental purchasers continued in large volume during November. Continental prices for these commodities continue on about a parity with those in the United States. Present British demand for United States products is limited principally to lard and A. C. hams. Fair prices have been maintained in England for these commodities but for most other packing house products, sold in the United Kingdom, prices have been below a Chicago parity. Reports from representative companies engaged in foreign trade show their November forwardings of meats and lard for export nearly equal in volume to those in October.

DAIRY PRODUCTS AND POULTRY

The factory output of dairy products was seasonally less in November than in October. November production of butter reported by representative creameries in the Seventh district was 14.0 per cent less than in October but 0.9 per cent greater than a year ago. Statistics issued by the American Association of Creamery Butter Manufacturers indicate a total November production in the United States somewhat smaller than in October but in excess of November last year. Wisconsin factories turned out less cheese in November, 1923, than in the previous month, although the output was greater than in the corresponding period in 1922. Sales of creamery butter declined 10.2 per cent in volume in November compared with October, but increased 6.1 per cent over those in November, 1922, according to reports made direct to this bank by representative companies in the Seventh district.

The total receipts of dairy products and poultry were greater at Chicago during November than a year ago. Compared with October, the November receipts of butter, cheese, and eggs declined, but those of poultry increased in response to holiday demand. Average prices during November of butter, eggs, and turkeys were firmer at Chicago than in October, but those of ducks, chickens, geese, and fowls were easier. Cold storage holdings of poultry and cheese in the United States were greater on December 1 than a month previous, but stocks of butter and eggs declined.

INDUSTRIAL EMPLOYMENT CONDITIONS

Employment figures at the close of November indicate a definite slackening during the month in the industrial activity of the district. A reduction of 1.7 per cent in the number employed by 296 manufacturing plants reversed the upward trend that was apparent during October, and again brought the volume of employment back to the early spring level. Many plants in order to keep their working forces intact, operated on shorter time-schedules and the total number of man-hours worked as reported by 175 firms shows a decline of over 6 per cent with corresponding reductions in aggregate payrolls. While the general level of employment continues to run higher than during the corresponding month a year ago, the difference has been reduced considerably. In 1922, an upward trend continued practically uninterrupted from the beginning of the year until late in December when the holidays and inventory taking caused a temporary decline.

Declines were registered for practically all of the industrial groups reporting for November. Employment in the iron and steel mills with a total of 18,000 men fell off nearly 10 per cent. Other iron and steel industries, including the manufacture of heavy machinery, railway equipment, steam pipe fittings, machine tools, and miscellaneous hardware, show a similar trend although the declines were less pronounced. Agricultural machinery, forming the one exception, showed a slight improvement, the first since early April. Railway repair shops report further reductions, especially in hours and payrolls. Brick yards generally were closing down for the season, while other building materials also showed curtailment. In the food products group, the declines were general, meat packing showing a downward trend not so much in volume of employment as in total hours worked and payroll figures. The same applies to the leather and furniture industries where decreases in payrolls and hours were heavy.

A remarkable steadiness in the volume of employment in the automobile industry is indicated by the figures from the Employers' Association of Detroit, although in this industry, as in others, there was a considerable reduction in the total hours worked.

According to reports published by several states of the

district, a decline in industrial employment set in earlier in Iowa and Wisconsin than in Illinois. In the last named state figures for the middle of November showed a decrease of not more than 0.4 per cent from mid-October. Including distributive as well as factory workers, the aggregate change shown for this period was a slight increase.

FUEL AND POWER PRODUCTION

COAL

Although there was a downward trend in the production of bituminous coal in the United States in November compared with October, weekly output was still maintained at a high level. The observance of Armistice Day and Thanksgiving Day caused production to fall below the 10,000,000-ton rate during the weeks ended November 17 and December 1. Average daily output during the week ended November 24 amounted to 1,693,000 tons, the lowest point reached since the week ended May 5, but rose during the following week to 1,763,000 tons. Despite the downward trend in production, bituminous coal mined during the entire year to date aggregated 526,489,000 tons, a larger amount than for any corresponding period since 1920.

Both Illinois and Indiana mines show a greater percentage of time lost by miners in November than in October, a condition which was due almost entirely to the lack of a market for the coal. Total Illinois production for November amounted to 6,061,410 tons, a decrease of 7.8 per cent from October and 17.4 per cent from November, 1922.

Among the reasons given for the slow movement of Illinois and Indiana coal during November and the early part of December were the continued mild weather and further declines in the prices of Pocahontas and smokeless coals shipped in from other fields. The price of Pocahontas mine-run has moved steadily downward during the year and on December 15 was selling at \$1.75@\$2.00.

The continued extremely light domestic demand has lead to a large accumulation of domestic sizes at the mines, thus forcing curtailment of operations. Stocks of screenings, which had been in a little better demand than the larger sizes, steadily diminished, this growing scarcity, rather than increased demand, resulting in strengthening in the price of screenings during November. A few operators influenced by the advanced prices for fine coal, are reported to have begun crushing their lump sizes. Many buyers are withholding the placing of orders, evidently in the hope that prices on fine coal will come down a little later when cold weather causes an increased demand for domestic sizes.

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For the week ended December 10, the average spot price of bituminous coal, according to Coal Age, was \$2.18, a new low record for the year, and a drop of 3 cents from the low point reached in November.

The sharp drop in anthracite output in the United States from 2,069,000 tons during the week ended October 27 to 1,373,000 tons during the following week was at least partly due to the general observance by anthracite miners of Mitchell Day on October 29 and All Saints' Day on November 1. The period of greatest activity in anthracite mining during November was the week ended November 24 when 2,100,000 tons were produced, a decrease of only 65,000 tons from the high record for the year. Total production for the month was estimated at 7,746,000 tons, a decline of 978,000 tons from October. There is a fair demand for anthracite chestnut, but it is becoming increasingly difficult to move the smaller sizes of hard coal. Chicago retailers have reduced their pea and buckwheat prices \$1.00 a ton.

ELECTRIC ENERGY

Reports from nine central station companies show that the aggregate production of electric energy in November decreased 3.6 per cent from October and was 9.3 per cent greater than in November, 1922. This decrease is largely due to the one more day in October than in November, for average daily production decreased but 0.4 per cent. The aggregate output of these companies was 508,763,178 K. W. H. in November. The load factor calculated from their reports was slightly less than in October, that for October being 44.2 per cent, and for November 43.8 per cent, as compared with 42.6 per cent in November, 1922. The peakload demand increased from 81.0 per cent in October to 82.0 per cent in November.

Aggregate sales to industrial users in November decreased 6.5 per cent from October, but were at a level 14.1 per cent above November, 1922. On a basis of the actual number of working days in the respective months, these sales were 1.0 per cent larger than in October and 14.1 per cent greater than in November, 1922.

MANUFACTURING ACTIVITIES AND OUTPUT

AUTOMOBILE PRODUCTION AND DISTRIBUTION

Combined passenger car and truck production figures indicate some curtailment by manufacturers during November when the output decreased 14.2 per cent compared with October. This decrease was not entirely the result of smaller production programs for a decrease of only 7.4 per cent in the daily average production took place. Comparison with November, 1922, shows an increase of 32.0 per cent, considerably smaller than that shown in the

yearly comparison in preceding months. Price changes in both directions were announced recently by several manufacturers.

Production of 3,700,162 passenger cars and trucks during the eleven months of 1923 represents an increase of 57.9 per cent over the same period of 1922, when the total production amounted to 2,343,835 combined cars and trucks. With the November production at 312,132 cars and trucks, it would seem quite possible that the industry may pass the 4,000,000 mark in 1923. Manufacturers, reporting direct to this bank and through the National Automobile Chamber of Commerce, representing practically complete October production, built 284,758 passenger cars in November compared with 334,244 in October, a decrease of 14.8 per cent. The November output of trucks for manufacturers who produced 29,638 trucks in October, was 27,374, a decrease of 7.6 per cent.

Sales of automobiles during November reported to this bank by eighty-four distributors and dealers in the Middle West were considerably smaller than in October, wholesale and retail distribution showing nearly the same rate of decrease, while compared with November, 1922, wholesale and retail transactions gained. Stocks of new cars on hand November 30, show considerable increase over both the previous month and a year ago, probably reflecting preparation of the trade for Christmas sales as well as for the heavy spring demand which dealers anticipate. Sales of used cars were also less than in October, although the yearly comparison indicates an increase. Used cars on hand November 30, which were equal to 150 per cent of the November used car sales, increased over October 31, and November 30, 1922.

DISTRIBUTION OF AUTOMOBILES

Changes in November, 1923, from previous months

	PER CENT CHANGE FROM		COMPANIE	SINCLUDED
0	ст., 1923	Nov., 1922	Ост., 1923	Nov., 1922
Number of new cars sold	,	,		,
Wholesale	-24.1	+ 9.0	50	40
Retail	-25.9	+ 9.0 + 9.7	78	60
Value of new cars sold				
Wholesale	-23.3	+ 7.1	50	40
Retail	-23.2	$^{+}_{+20.3}$	78	60
New cars on hand at end of month				
Number	+28.5	+18.4	79	53
Value	+25.9	+18.4 + 3.4	79	53 53
Number of used cars				
sold	- 5.5	+23.2	81	58
Salable used cars on hand at end of month				
Number	+11.4	+23.9	75	47
Value	+ 8.6	+11.3	75	47

Shipments of automobiles reported by the National Automobile Chamber of Commerce show large seasonal decreases in driveaways and boat shipments, and a lesser decrease in carload shipments.

Exports of passenger cars during October from the United States were only two less in number than during September, while the value increased \$500,000. Trucks exported were nearly double those exported in September, although the value increased by only one-half, indicating large exports of trucks in the lower priced field. Inventories of casings on October 31, as reported by the Rubber Association of America, were again under those of the previous month, making the fourth consecutive month in which smaller inventories were shown. Inner tube inventories increased for the first time in the past five months.

CASTINGS

In all items except iron scrap, which showed only a slight decrease, consumption of iron and steel by twenty-five casting foundries in the district was in markedly smaller volume in November than October; large decreases being likewise shown in all items but iron scrap in comparison with the average consumption in the preceding ten months. Large declines in the volume of shipments and in their value were also reported.

CHANGES IN NOVEMBER, 1923, FROM PREVIOUS MONTHS

Compiled from direct reports to this bank

Pi	ER CENT	CHANGE FROM CO	MPAN	IES INCLUDED
	Ост.	Mo. Av.	Ост.	Mo. Av.
	1923	10 Mo. 1923	1923	10 Mo. 1923
Pig iron consumed	-24.5	-21.7	25	19
Iron scrap consumed	- 4.7	+18.3	25	19
Steel scrap consumed	-10.8	12.5	25	19
Total tonnage consumed	-13.4	-12.5	25	19
Castings shipped (tonnage)	-19.8	-11.3	25	20
Castings shipped (dollars)	-18.5	- 5.2	24	24

IRON AND STEEL

Reaching the lowest point since the same month last year, pig iron production in November was at an average daily rate of less than 100,000 tons per day. While the decline in total November production was approximately 8 per cent, the average daily output was only about 5 per cent below the previous figure, because of the shorter month. The decline in the Illinois and Indiana district was at a somewhat greater rate. The net loss of furnaces in the country for November was fourteen, compared with ten in October. In the Chicago district the decline in new business the first of the month necessitated some curtailment; increases in the volume, however, toward the end of the month permitted an increase in operations to about the average production.

Inventories at steel plants in the district continue low and prices remain relatively firm. The decrease in the aggregate output of steel ingots in November was even more pronounced than that of pig iron. Both in the total and in average daily production, which declined 12 and 9 per cent, respectively, from October, the lowest point since September, 1922, was reached.

The month was featured by a remarkable buying movement in pig iron trade accompanied by substantial and well maintained purchasing of small lot steel. The month opened with conditions rather unsettled; fairly large volume of inquiries; moderate amount of buying; and price of pig iron slumping. With a continuance of lowering prices there simultaneously appeared an increasing demand until in the third week of the month the bookings nearly equalled the high points in the early months of the year. Prices then firmed and buying, while still in large volume, became less active. The month ended with the composite of iron and steel prices at a lower level than in the previous month, but rapidly becoming more firm and with week-to-week comparisons showing increases. Most of the buying was for the first quarter. A feature of the steel market was the buying of the railways which continued until the end of the month before slackening. Unfilled orders, however, showed a substantial decrease in November as compared with October, and by the end of the month had reached the lowest point since February, 1922.

The monthly report of the American Zinc Institute reveals a further increase in the production of slab zinc. The aggregate production in November was 44,280 tons, which compares with 42,098 tons in October. Shipments in November remained at practically the same level as in October, the totals for these months being 39,163 tons and 39,204 tons, respectively. Reports from the Joplin district show that the shipment of zinc ore in November was the largest of any month this year with the exception

of March; and the total shipments during the first eleven months of this year exceed those of the corresponding period last year by 45.8 per cent in tonnage and 80.7 per cent in value.

STOVES AND FURNACES

Shipments of stoves and furnaces as well as orders reported by seventeen firms declined seasonally in November. While this reduction from October was large, these items were in advance of last year, but to a less marked degree than in October and September. Inventories were slightly lower than in October but considerably greater than last year. Production, as measured by operations in the moulding room, slackened in November.

CHANGES IN NOVEMBER, 1923, FROM PREVIOUS MONTHS

	PER CENT C	HANGE FROM	COMPANIE	SINCLUDED
C	ост., 1923	Nov., 1922	Ост., 1923	Nov., 1922
Shipments	-32.2	+ 7.3	17	17
Orders accepted	-44.9	+ 9.2	13	13
Inventories	— 3.7	+24.8	12	12
Operations (moulding room)	- 6.9	+ 4.4	17	17

AGRICULTURAL MACHINERY AND EQUIPMENT

Reports in dollar amounts made direct to this bank by 107 manufacturers of agricultural machinery and equipment in the United States show that domestic sales declined 37.1 per cent in November compared with the previous month. This decline in domestic sales resulted in the aggregate of domestic and export billings being 30.3 per cent less than in October, 1923, although exports alone decreased but 4.2 per cent. The falling off in the November total sales from those for October seems to be seasonal in character, as figures for the corresponding months a year ago, reported by seventy-nine of the companies, indicate that total billings in November, 1922, were 38.8 per cent below those in October, 1922. Complete figures for November, 1922, for comparison with the corresponding period in 1923 are not available, but reports for both months furnished us by eighty identical manufacturers indicate that the total sales in November, 1923, were 25.2 per cent greater than in November last year.

Practically no change in production in November is indicated by employment figures compiled from the reports submitted by seventy-five companies. The total number employed by these companies in November averaged 61.6 per cent of the normal for that month while in October the identical companies reported employment equal to 62.1 per cent of the October normal.

SHOE MANUFACTURING, TANNING, AND HIDES

The production and shipments of shoes by reporting factories in the district were greater in November than in the same month a year ago, but show a seasonal recession from October. November production was 4.5 per cent greater than current shipments. Inventories of twenty-two companies on December 1, 1923, were equivalent to 48.4 per cent of their shipments in November, 1923. Unfilled orders held by twenty concerns equal approximately nine weeks' business at the November rate.

CHANGES IN THE SHOE MANUFACTURING INDUSTRY, IN NOVEMBER, 1923, COMPARED WITH PREVIOUS MONTHS Based on pairs and compiled from direct reports to this bank

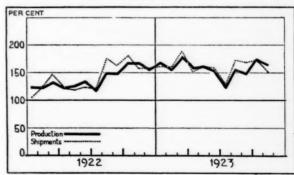
Dasca on pans and	a compared i	nom duces rel	orre to this	DELLER
	PER CENT C	HANGE FROM	COMPANIES	INCLUDED
(Ост., 1923	Nov., 1922	Ост., 1923	Nov., 1922
Production	5.5	+ 0.7	28	28
Shipments	-12.6	+ 2.5	28	28
Inventories	+17.6	- 2.1	23	18
Unfilled orders	+21.4	-12.5	10	18

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Leather production in November was reported smaller than in October, 1923, by representative tanners in the Seventh district. The total volume of leather sold in November was indicated as 10 to 20 per cent below that in October and was considerably less than in November last year. The principal demand at present is for leather suitable for men's dress shoes as well as for suede and patent. Leather prices were easier in November than in the previous month. Tannery inventories on December 1, 1923, were indicated as slightly greater than at the first of November. Figures for the period covered by the last pay-date in November, 1923, show that in the tanning industry employment declined 0.7 per cent in number, 14.5 per cent in total payrolls, and 14.7 in total hours worked, compared with the corresponding period in October.

The markets for calf and kip skins and packer green hides were more active at Chicago during November than in the previous month, but total shipments of hides and skins from Chicago declined. The volume of November purchases of green hides and skins by reporting tanners in the Seventh district was indicated as slightly greater than in October, although limited principally to current requirements. Sheep skins were firmer but prices of other kinds of skins and of hides averaged lower at Chicago during November than a month ago.

INDEX OF PRODUCTION AND SHIPMENTS OF SHOES, 7TH DISTRICT



Latest figures shown, November, 1923: Production, 164.1; Shipments, 151.4.

RAW WOOL AND FINISHED WOOLENS

Decreased supplies in the United States and the strong market abroad have contributed to the expansion in wool sales during November. Medium and lower grades continue in the greatest demand, but all higher grades are also manifesting increased activity over a month ago. This quickened demand has been reflected in a general upward movement in prices on all grades of wool. Some of the purchases by woolen mills have been made in anticipation of the 1924 heavy-weight season which opens in January, while the increased demand on the part of worsted spinners for quarter and three-eighths blood wools seems to have been chiefly for current requirements.

At Chicago during November both receipts and shipments of wool showed increases over October, the former 54.5 per cent and the latter 2.9 per cent; compared with a year ago there were decreases of 19.3 per cent and 33.3 per cent, respectively. Woolen mills reported little change in their business during November, with no anticipated improvement before the opening of the 1924 heavy-weight season. Sales and production of woolen goods were maintained at about the same level as in October and prices remained steady.

FURNITURE

Despite a curtailment both in production and in shipments of furniture during November, orders reported for the month indicate a better demand than in October. Operations of fourteen furniture plants averaged 77.7 per cent of capacity during November compared with 87.0 per cent in the previous month. According to reports from seventeen firms, orders increased 7.3 per cent while shipments declined 22.7 per cent from October; compared with a year ago there was a contraction of 9.8 per cent in orders and 10.8 per cent in shipments. Unfilled orders, according to figures from thirteen firms, increased during November, and by the end of the month were 5.8 per cent greater than on October 31; compared with a year ago they were 37.6 per cent less. Based on November shipments these firms continued to show an average of about four weeks' business on hand on December 1. Collections, although better than a year ago, showed little change from October.

BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES

CEMENT

Shipments of cement in the district decreased during November, largely on account of the decline in construction activities, though sales are still above normal for this time of year. Stocks have increased and prices have declined in some sections.

Production for the country as a whole decreased 5.6 per cent during the month. November production, however, was 11.1 per cent higher than last year and shipments increased 0.8 per cent. Stocks are 51.5 per cent greater than at the close of October, and 30.9 per cent above last year. Cement on hand at the end of the month was equal to 55.3 per cent of the production for the month, and 51.6 per cent of the total stocks held in February, which was the high point of the year.

BRICK

Lessened demand for brick in a greater part of the district has accompanied slackening in construction. Sales have fallen off and several plants are closing down with heavy stocks. Plants still open are reducing activities, and in some localities have made price concessions in order to stimulate sales.

In the territory around Chicago, however, the demand was maintained above normal during November, with prices firm at the former levels. Some large producers reported capacity operations throughout the month. Only slight increases in stocks were reported.

LUMBER

Reports from lumber dealers throughout the district show that the decline expected in October did not manifest itself until November, when many dealers reported lower sales, although some reported increases in that month. Nearly all dealers, however, reported increases over November last year. Stocks are lower and with the approach of the inventory season dealers are doubtless hesitant about buying until after the first of the year. In the larger cities the demand has been stronger than expected on account of the continued favorable building weather. Prices have remained practically unchanged. Gross receipts at Chicago were 5.8 per cent below October while shipments were 3.7 per cent greater. Net receipts established a new low point for the year, being 18.1 per cent below the October figure.

In the western part of the district, especially in Iowa, demand is still slow, but dealers report collections up to normal. In Indiana business is slow with a reduction of prices in some localities.

CONTRACTS AND PERMITS

Contracts and permits for the district reflect the lateness of the usual seasonal change this year, in that the decline in activities was not felt until November. Contracts awarded for the month were valued at \$43,690,353, or 25.0 per cent less than October. The decrease in residential construction was less marked, amounting to 18.9 per cent. In Iowa, residential building increased 41.2 per cent, and in Illinois 6.8 per cent; other states reported decreases for all types. Contracts awarded in the district during eleven months this year were 0.4 per cent below the same period last year, while residential construction expanded 14.2 per cent, and was 5.0 per cent greater than the total residential contracts for 1922.

Permits issued by fifty cities were 27.6 per cent fewer than in October, although the estimated cost decreased 16.3 per cent. Compared with last November, the number of permits increased 13.4 per cent, and the estimated cost 13.8 per cent. Permits issued in the five large cities decreased 27.7 per cent, but were 9.8 per cent greater than in November, 1922. Decreases for the month amounted to 2.0 per cent for Chicago, and 5.1 per cent for Des Moines. In Detroit, Milwaukee, and Indianapolis, the decreases were 28.2, 34.0, and 35.6 per cent, respectively. Estimated costs in these cities decreased in about the same proportion except in the case of Des Moines, where there was an increase of 20.5 per cent.

MERCHANDISING CONDITIONS

WHOLESALE TRADE

A moderate seasonal contraction in wholesale distribution took place during November—the normal result of retailers being occupied with holiday trade, and wholesalers giving attention to inventory preparations. This slower movement was noticeable in all parts of the district, only thirteen of the ninety-eight dealers reporting to this bank having made gains over October. Most of

Page 10 January

these were grocers, so that this group averaged, as in 1921 and 1922, the smallest percentage decrease. The largest decline from the previous month was in shoe sales, the 30.2 per cent being twice as large as the 1922 decrease.

Shoe sales also showed the only decrease from November, 1922, although most of the gains in other commodities were less marked than the average for the first ten months of the year. Compared with November, 1921, sixty-eight out of ninety-four dealers reported larger sales this year.

Reduction in stocks during the month was general, the declines ranging from 2.8 per cent in drugs to 16.4 per cent in dry goods. Inventories for automobile accessories, however, averaged a gain of 0.4 per cent, and groceries continued as in previous months with increases for the majority of reporting dealers. Comparisons with November, 1922, vary with half the grocery firms and more than half the shoe and drug dealers reporting decreases.

Accounts outstanding November 30 for most of the firms were less than at the beginning of the month, with nearly 60 per cent, however, showing increases over a year ago. Collections were in smaller volume than during October, but for the large majority of firms, considerably heavier than during November, 1922.

DEPARTMENT STORE TRADE

Only about a third of the department stores reporting regularly to this bank maintained as large a volume of business through November as during October. For the district as a whole, the decrease of 3.5 per cent compares with a 5.3 per cent gain in 1922, when all but ten firms increased their sales over the previous month. The condition this year bears more resemblance to two years ago, at which time the majority of firms showed decreases from October.

As usual, holiday purchasing was an element in the November trade this year, but of not sufficient momentum to counteract the effect of the fewer trading days and the influence of the continued warm weather in delaying the need for many seasonal goods.

Compared with November, 1922, decreases were shown by nineteen stores, the largest number since May, so that the gain for the entire group amounted to only 8.7 per cent. The increase of 24 per cent over November, 1921, reflected individual gains by forty-six firms.

Considerably over half the stores reduced their stocks during November, although increases by some of the larger stores resulted in an average gain for the district of 4.1 per cent. With few exceptions, dollar inventories continued higher than in 1922, but in proportion to the increased sales indicate a lower operating ratio.

Of forty-three returns showing accounts outstanding at the beginning of November, thirty-nine had larger amounts on their books than the previous month, and thirty-six larger than a year ago; collections for the same firms showed eleven decreases from October, and seven from November, 1922.

CHAIN STORE TRADE

The eight chain store systems reporting November sales to this bank all showed gains over the corresponding month in 1922, with aggregate sales for the group, however, averaging only 17 per cent ahead of last year.

The increase of 1.6 per cent over October, 1923, reflects individual expansion by only two systems, as business for the others fell off with the decrease for one system as high as 22 per cent.

MAIL ORDER TRADE

The November business of Chicago's two leading mail order houses fell short of the October record by 8.5 per cent—a decrease that compares with gains of 3.2 per cent and 26.5 per cent, respectively, in 1922 and 1920, and a decline of 4.9 per cent in 1921. November returns show an increase of 10.7 per cent over November, 1922, which is the smallest yet noted, reducing the average excess for 1923 over 1922 to 29.8 per cent. For part of the slackened trade in this district, the continued mild weather may be considered responsible, as sales in goods not of a seasonal nature made decided increases over last year.

TRANSPORTATION

The seasonal decline in the volume of freight carloadings during the month of November was not sufficient to cause the weekly average for the month to drop below a million. During four successive months the railroads have averaged over a million cars per week, October being the peak month.

A net operating income of \$102,746,150 for all Class I railroads is credited to October. Although this figure is considerably less than the theoretical monthly apportionment set against that month as a fair earning on a yearly basis, as computed by the Bureau of Railway Economics, and based on the tentative valuation established by the Interstate Commerce Commission, it exceeded the net operating income of any previous month of this year.

MONTHLY BUSINESS INDICES COMPUTED BY FEDERAL RESERVE BANK OF CHICAGO

(Index numbers express a comparison of unit or dollar volume for the month indicated, using the monthly average for 1919 as a base, unless otherwise indicated. Figures for latest month shown partly estimated on basis of returns received to date. Data refer to the Seventh Federal Reserve District unless otherwise noted.)

No. of Nov. Oct. Nov. Oct. Nov. Oct. Firms 1923 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1922 1	
Employment	Oct. 1922
Number Employed	
Number Employed	
Amount of Payroll 56 79.6 88.1 73.4 74.2 Hardware 21 100.0 119.2 92.6 8.1 Mill Industries: Number Employed 296 98.7 98.2 92.6 Mount of Payroll 296 11.1 11.8 117.8 101.7 102.1 Drugs 11 104.9 115.0 92.5 Amount of Payroll 296 11.1 11.8 101.7 102.1 Drugs 14 104.9 115.0 92.5 Shipments (in dollars) 18 91.1 139.0 106.3 119.4 Agricultural Pumps—(U.S.)— Shipments (in dollars) 13 118.7 159.1 143.3 147.9 Determinent Stores)— Net Sales (in dollars) 13 118.7 159.1 143.3 147.9 Determinent Stores)— Net Sales (in dollars) 13 118.7 159.1 143.3 147.9 Determinent Stores)— Net Sales (in dollars) 13 118.7 159.1 143.3 147.9 Determinent Stores)— Net Sales (in dollars) 13 118.7 159.1 143.3 147.9 Determinent Stores)— Net Sales (in dollars) 13 118.7 159.1 143.3 147.9 Determinent Stores)— Net Sales (in dollars) 13 118.7 159.1 143.3 147.9 Determinent Stores)— Net Sales (in dollars) 13 118.7 159.1 143.3 147.9 Determinent Stores)— Net Sales (in dollars) 13 118.7 159.1 143.3 147.9 Determinent Stores)— Net Sales (in dollars) 13 141.9 129.7 Chicago 9 134.3 141.9 129.7 Determinent Stores)— Net Sales (in dollars) 14 141.8 183.6 Des Moines 3 10.6 148.9 159.7 143.8 Des Moines 3 10.6 148.9 159.7 143.8 Des Moines 3 10.6 149.9 Determinent Stores)— Net Sales (in dollars) 14 141.8 183.6 Des Moines 3 10.6 149.9 141.9 129.7 146.7 152.0 134.9 Des Moines 3 10.6 149.9 145.0 Outside 41 129.1 141.5 129.1 141.5 129.1 141.5 129.1 141.5 129.1 141.5 129.1 141.5 129.1 141.5 129.1 141.5 129.1 141.5 129.1 141.5 149.9 Determinent Stores 3 142 148 131.1 Industrial Sales (KWH) 10 164.1 175.5 141.1 147.3 160.1 141.1 152.1 141.1 147.3 141.9 141.1 147.3 141.9 141.1 147.3 141.9 141.1 147.3 141.9 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1 1	82.0
Number Employed	103.3
Amount of Payroll. 296 111.1 117.8 101.7 102.1	77.5
Meat Packing	104.2
Sales (in dollars) 63	98.9
Stoves and Furnaces— Shipments (in dollars). 18 91.1 139.0 106.3 119.4 Agricultural Pumps—(U.S.)— Shipments (in dollars). 21 89.8 97.9 87.2 100.8 Furniture2— Orders (in dollars). 13 119.8 112.4 141.8 183.6 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 147.9 143.5 143.3 143.9 143.5 143.5 143.3 143.9 143.5 143.5 143.3 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 143.5 1	64.0
Shipments (in dollars). 18 91.1 139.0 106.3 119.4 119.4 Agricultural Pumps—(U.S.)— Shipments (in dollars). 21 89.8 97.9 87.2 100.8 Chicago 9 134.3 141.9 129.7 143.8 Chicago 9 134.3 141.9 129.7 140.8 130.7 Chicago 9 134.3 141.9 129.7 Chicago 9 134.3 141.9 129.7 Chicago 9 134.3 141.9 129.7 140.8 130.7 Chicago 9 134.3 141.9 129.7 140.8 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.8 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9 140.9	04.0
Shipments (in dollars) 21 89.8 97.9 87.2 100.8 Furniture2	1
Furniture2— Orders (in dollars)	
Orders (in dollars)	124.3
Shipments (in dollars). 13 118.7 159.1 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 143.3 147.9 144.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3 147.3	130.5
Shoes3	106.5
Production (in pairs)	150.7
Shipments (in pairs) 37 151.4 173.3 158.1 180.6 Electric Energy—	143.3
Column C	109.2
Output of Plants (KWH) 10	128.1
Industrial Sales (KWH) 10	
Flour Production—	130
Clar	109
Preight Carloadings—(U. S.)— Grain and Grain	140
Products	149 133
Products	133
Live Stock 127.1 132.1 119.6 121.7 Coal 111.0 118.7 119.0 117.9 Coke 123.8 130.7 133.5 113.0 Forest Products 130.3 129.4 108.2 103.7 Ore 111.5 164.9 90.6 125.8 Merchandise and Miscellaneous 131.8 159.5 120.7 124.0 Total 125.9 133.9 118.9 121.6 Iron and Steel— Pig Iron Production: Illinois and Indiana 132.5 147.4 113.6 103.0 United States 113.6 123.6 111.8 103.5 Steel Ingot Production (U. S.) 107.8 122.8 118.7 118.0 Unfield Orders U. S. Steel Corp. 72.9 78.0 114.1 115.1 Production: Passenger Cars 206.1 242.0 155.8 156.4 Trucks 105.9 114.6 82.4 81.6 Total 111.0 118.7 120.0 137.9 121.6 Music 24 149 137 121 Candy 4 174 185 145 Cigar 3 134 138 127 Movement of Grain at U. S. Interior Primary Markets—4 Receipts: Oats 91.2 144.5 117.4 Corn 157.0 110.4 153.9 Wheat 118.7 122.0 131.8 Shipments: Oats 80.1 106.4 97.5 Corn 69.7 60.6 92.7 Wheat 58.9 60.6 86.9 Wheat 58.9 60.6 86.9 Trucks 105.9 114.6 82.4 81.6 Total 79.5 105.9 82.7 Shipments (Monthly Average, 1920=100):	155
Coal	119
Coke	150
Total	127
Merchandise and Miscellaneous 131.8 159.5 120.7 124.0 Total 125.9 133.9 118.9 121.6	
Merchandise and Miscellaneous 131.8 159.5 120.7 124.0 Primary Markets—4	
Total	
Tron and Steel	
Fig Iron Production: 11 11 11 11 11 11 11	126.0
High From Production: 132.5 147.4 113.6 103.0 103.0 118.7 122.0 131.8 118.7 123.0 131.8 132.5 147.4 113.6 103.0 132.5 147.4 113.6 103.5 132.5 147.4 113.6 103.5 132.5 147.4 113.6 103.5 132.5 147.4 113.6 103.5 132.5 147.4 113.6 103.5 132.5 147.4 132.6 111.8 103.5 106.4 97.5 106.6 92.7 107.8 122.8 118.7 118.0 118.7 122.0 131.8 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.5 132.	220.6
Thinois and Indiana 132.5 147.4 113.6 103.5 113.6 123.6 111.8 103.5 113.6 123.6 111.8 103.5 113.6 123.6 111.8 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5 103.5	156.1
Chited States	100.1
Corn 69.7 60.6 92.7	88.4
Wheat S8.9 60.6 86.9	157.3
Steel Corp. 72.9 78.0 114.1 115.1 Building Construction— Contracts Awarded (in dollars): Residential 127.6 157.4 138.8 Trucks 105.9 114.6 82.4 81.6 Total 79.5 105.9 82.7 Shipments (Monthly Average, 1920=100): Contracts Awarded (in dollars): Residential 127.6 157.4 138.8 Total 79.5 105.9 82.7 Residential 79.5 105.9 82.7	88.4
Automobiles—(U. S.)— Production: Passenger Cars	
Production: Passenger Cars	
Passenger Cars	
Trucks 105.9 114.6 82.4 81.6 Total 79.5 105.9 82.7 Shipments (Monthly Average, 1920=100): Chicago Number 288.9 294.7 206.0	126.2
Shipments (Monthly Average, 1920=100): Permits: ChicagoNumber 288.9 294.7 206.0	94.7
Average, 1920=100): ChicagoNumber 288.9 294.7 206.0	7
Cost 210 4 200 c 025 4	200.9
Carifornia ingla aut. a louis teste	172.7
Driveaways 74.2 96.7 69.8 89.7 Indianapolis Number 181.5 282.0 158.3	226.4
Roat (Rase Figures Cost 172.4 258.7 234.8	228.1
(1920), partly esti- Des MoinesNumber 218.6 230.4 173.5	161.8
mated)	370.7
Stamp Tax Collec- DetroitNumber 136.8 191.5 123.1	
tions—(First Illinois Cost 121.3 180.5 111.8	
Internal Revenue MilwaukeeNumber 176.5 269.0 185.7	
District) — Cost 156.5 310.8 129.6	
Sales or Transfer of Others (45)Number 172.9 238.8 144.1	
Capital Stock	
Sales of Produce on Fifty CitiesNumber 174.9 241.7 154.2	
Exchange — Futures 45.3 37.5 52.6 47.6 Cost 198.2 236.8 174.2	

1. Monthly average, 1920-1921=100; 2. Monthly average 1919-1920-1921=100; 3. Monthly average of mean of production and shipments in 1919=100; 4. Monthly average receipts 1919=100.

The following are sources of data used in obtaining the index numbers in cases where they are not based on direct returns to this bank; Iron and Steel—Iron Age, Iron Trade Review, and Steel and Metal Digest; Automobile shipments—National Automobile Chamber of Commerce; Freight Carloadings—American Railway Association; Retail Trade, United States—Federal Reserve Board; Movement of Grain—Howard, Bartels & Co., Daily Trade Bulletin.

